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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,149	02/06/2002	Mark W. Kimberlin	D-2978	1374

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EXAMINER

SALDANO, LISA M

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,149

Applicant(s)

KIMBERLIN ET AL.

Examiner

Lisa M. Saldano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 10-12, 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Peterson (5,257,878).

Regarding claims 1 and 23, Peterson discloses a sediment mat 10 comprising substantially planar flexible matting including a layer 11a being mesh such as woven hemp, chicken wire, jute, or some other suitable sediment permeable material. The matting is deployable in a substantially horizontal orientation (see column 3, lines 14-26).

Regarding claims 1, 10, 11 and 26, Peterson also discloses that the matting comprises another layer 11b being burlap, geo-textile, plastic or some other suitable permeable material. Peterson further discloses a core layer 12 having substantially flat upper and lower surfaces formed of sediment absorbing material such as straw or excelsior, which forms a fiber matrix (see Fig.2).

Regarding claims 1, 12, 24 and 25, one layer is permanent and is bonded to a surface of the core layer 12 through bat-stitches. The flexible matting is structured to control erosion of a substantially un-vegetated surface when placed on a substantially un-vegetated surface.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson as applied to claim 1 above.

Regarding claims 2-8, Peterson discloses the sediment mat, which is structured to function as an erosion control system, as described above, which comprises flexible matting.

However, Peterson fails to explicitly disclose the density of the matting, the roughness of the upper surface of the matting, a range of velocities for liquid flow on the matting and a range of durations for liquid flow exposure.

It would be obvious to one of ordinary skill in the art at the time of the invention to have developed the features claimed by the applicant from Peterson's inventions because although Peterson does not explicitly disclose these matting characteristics, they are in the range of

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characteristics for the inventions disclosed by Peterson. For example, Peterson discloses that the flexible matting may comprise core materials including straw or excelsior. There are many different kinds of straw materials that would have varying densities and would therefore also provide a range of densities for the core of the flexible matting and the matting itself. Therefore, it is possible to use the materials disclosed by Peterson in his invention to achieve the range of densities claimed by the applicant. Furthermore, the characteristics disclosed by Peterson may also be used to achieve the various roughnesses, and velocity and exposure durations claimed by the applicant.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson as applied to claim 1 above in view of Lancaster (5,849,645) OR Granite Seed Company 1999-01-28, (on-line) retrieved from the Internet Archive Database using internet:

URL:<http://web.archive.org/web/19990128060024/www.graniteseed.com/erosion/index.html>.

Peterson discloses the sediment mat as disclosed above wherein the core of the mat comprises a fiber matrix material of straw or excelsior.

However, Peterson fails to explicitly disclose that the straw used in the core of the mat comprises coconut fibers, flax fibers, polypropylene fibers and combinations thereof.

Lancaster discloses an erosion control system 10 comprising a flexible matting adapted to be placed on a sloped, substantially unvegetated surface wherein the matting includes an upper surface netting 50, a lower surface 30 and a core layer including a fiber matrix 20 and cusped netting 40. The upper layer 50 is bonded to the core layer wherein the core and upper layers define a substantially flat upper surface (see Fig. 4). Also, the upper layer 50 comprises a geogrid

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(see Figs. 5A, 5B and column 4, line 64 through column 5, line 4). Lancaster also discloses that the erosion control system comprises a fiber matrix that may include a material selected from the group consisting of coconut fibers, flax fibers, polypropylene fibers and combinations thereof (see column 2, lines 31-35), but may include any commercially available fibers.

The Granite Seed Company discloses erosion control blankets or mats titled "Greenfix America" comprising synthetic or organic netting with cores comprising sudan grass, rice straw or coconut fibers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Peterson's mat to use coconut fibers, flax fibers, polypropylene fibers and combinations thereof as taught by Lancaster because Peterson simple teaches the use of straw in the mat, which does not preclude the use of the aforementioned straws. Therefore, since Lancaster suggests the use of these specifics straw fibers for application on riverbeds for the purpose of controlling sediment, it would be obvious to use them in the Peterson invention.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Peterson's mat to use sudan grass or rice straw as the commercially available straw for the mat, as taught by the Granite Seed Company, because The Granite Seed Company clearly states that the sudan grass or rice straw is formed into mats or blankets and thereby structured to be placed on an unvegetated surface to provide erosion control for areas subject to wind and water. Since Peterson discloses the use of straw, it does not preclude the use of sudan grass or rice straw for purposes of providing a core of straw material.

6. Claims 14, 16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (5,257,878) in view of Granite Seed Company 1999-01-28, (on-line) retrieved from the Internet Archive Database using internet:

URL:<http://web.archive.org/web/19990128060024/www.graniteseed.com/erosion/index.html>.

Regarding claims 14 and 16, Peterson discloses a sediment mat 10 comprising substantially planar flexible matting including a layer 11a being mesh such as woven hemp, chicken wire, jute, or some other suitable sediment permeable material. The matting is deployable in a substantially horizontal orientation (see column 3, lines 14-26).

Regarding claims 14, 16, 18, 21 and 22, Peterson also discloses that the matting comprises another layer 11b being burlap, geo-textile, plastic or some other suitable permeable material. Peterson further discloses a core layer 12 having substantially flat upper and lower surfaces formed of sediment absorbing material such as straw or excelsior, which forms a fiber matrix (see Fig.2). One layer is permanent and is bonded to a surface of the core layer 12 through bat-stitches. The flexible matting is structured to control erosion of a substantially un-vegetated surface when placed on a substantially un-vegetated surface.

However, Peterson fails to explicitly disclose that the straw may be essentially Sudan grass or essentially of rice straw.

Regarding claims 19 and 20, the Granite Seed Company discloses erosion control blankets or mats titled "Greenfix America" comprising synthetic or organic netting with cores comprising sudan grass, rice straw or coconut fibers. The Granite Seed Company further discloses that erosion control blankets may be made from 100% coconut fiber for higher flow areas for added protection. Therefore, The Company discloses that blankets may comprise

essentially one type of straw material for more protection in light of the properties that the one type of straw possesses.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Peterson's mat to use essentially sudan grass or rice straw as the commercially available straw for the mat, as taught by the Granite Seed Company, because The Granite Seed Company clearly states that the sudan grass is formed into mats or blankets and thereby structured to be placed on an unvegetated surface to provide erosion control for areas subject to wind and water. Since Peterson discloses the use of straw, it does not preclude the use of sudan grass for purposes of providing a core of straw material. Furthermore, The Granite Seed Company discloses the use of 100 percent of a specific type of straw for behavioral purposes. It would be obvious to use essentially one type of straw material in the mat if one desired the specific properties of the straw for exclusively the mat, such as durability or low absorption. It would be equally obvious to exclude a specific type of straw, such as wheat straw, if one did not desire the properties that specific straw possessed.

Response to Arguments

7. The applicant has amended claims 1, 4, 5, 14, 16, 19 and 20 and added new claims 23-26.
8. Applicant's arguments with respect to claims 1-12, 14, 16 and 18-22 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

lms
July 31, 2003



HEATHER SHACKELFORD
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